

ADA & New Development In Bexar County



CoSA/Bexar County Lunch and Learn

May 27, 2011

Purpose

This presentation has been created to clarify Bexar County requirements for ADA compliant design of accessible facilities within public rights-of-way in new development in the unincorporated areas of Bexar County.



Topics Presented

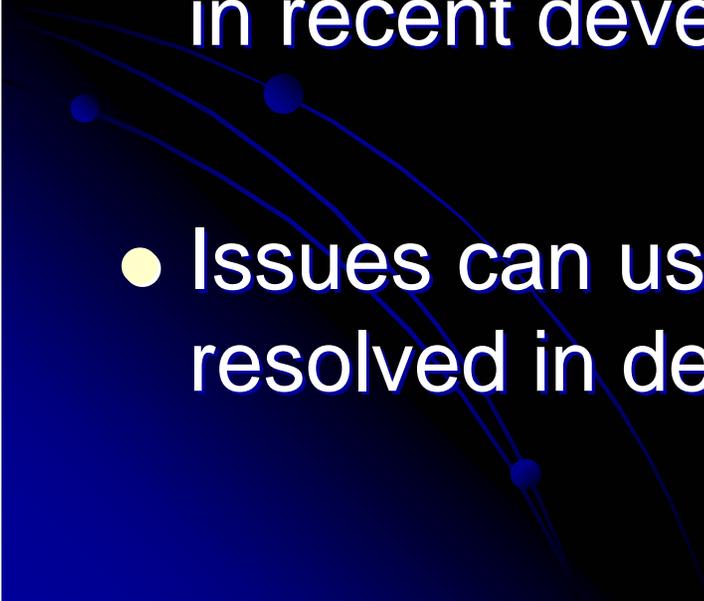
- Background Information and Bexar County ADA Transition Plan
 - Brief History of ADA standards for Development in unincorporated areas of Bexar County
 - Identify common ADA design issues and list current regulations, design details and common design elements
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Background

... The complaint alleged that the County failed to install detectible warnings at curb cuts, failed to design roads with medians that comply with the ADA and that Bexar County has followed a pattern and practice of not making their sidewalks constructed after the effective date of the ADA accessible to persons with disabilities.

- From a correspondence to Bexar County from FHWA

Background

- There is confusion about standards and designs
 - Issues with ramp and accessibility design in recent development are ongoing
 - Issues can usually be identified and resolved in design phase
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Bexar County ADA Transition Plan

- Approved by Commissioner's Court March 30, 2010
- Applies to New Development
- Applies to ALL County Projects and Maintenance Projects
- Currently a Seven-Part plan

Bexar County ADA Transition Plan

Some Objectives:

- Ensure all newly constructed pedestrian facilities that are constructed by Bexar County meet the most current TAS standards.
- Ensure all Public Works Projects are TAS compliant.
- Use best effort to ensure current COSA regulations requiring developers to build and/or upgrade the pedestrian facilities bordering their property to current TAS pedestrian facility standards upon certain development and construction activities are being complied with.

4 DIFFERENT RAMP DESIGNS



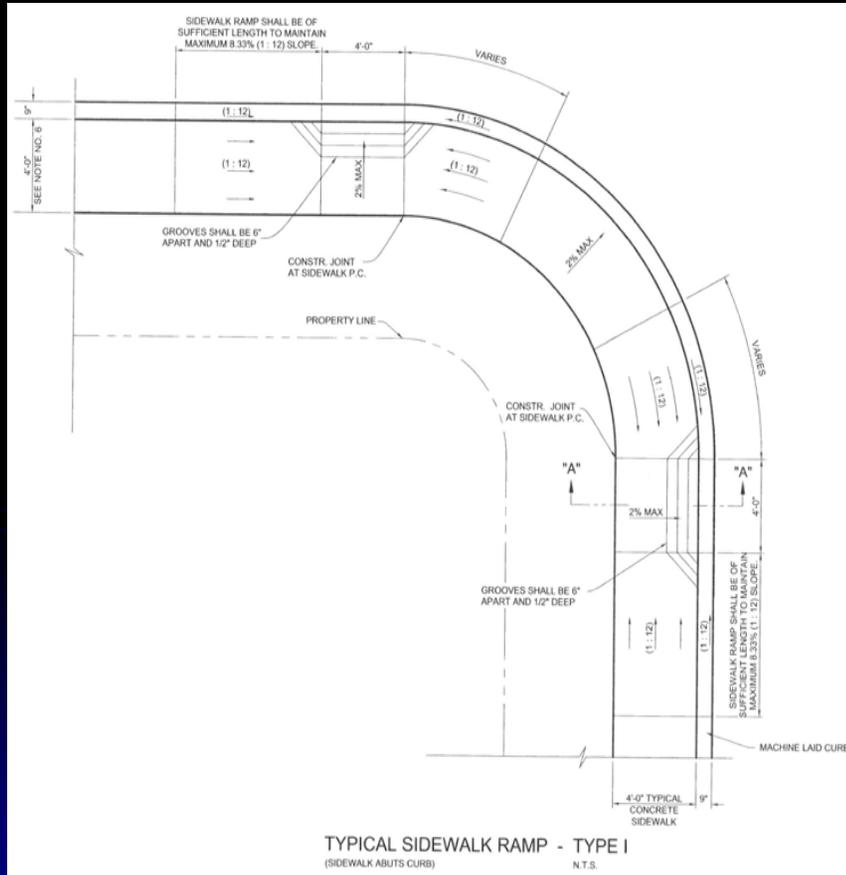
AT THE SAME INTERSECTION



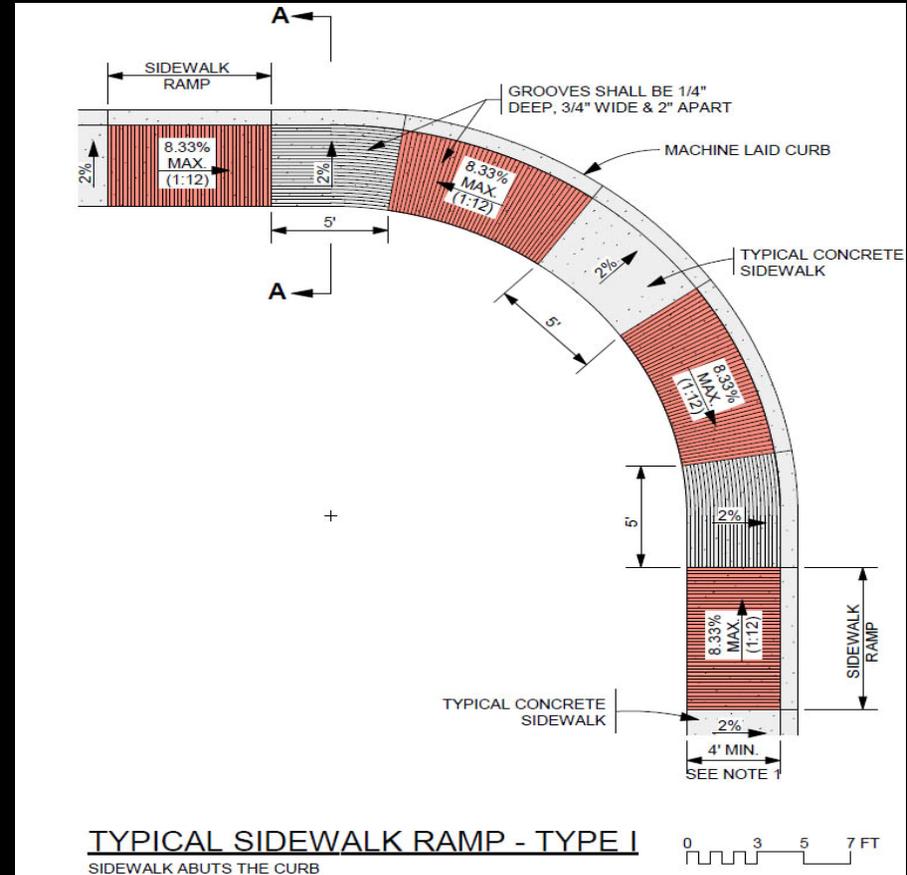
History

- Standards and details have changed
- New designs must show DESIGN accommodations for accessibility

Ramp Design History

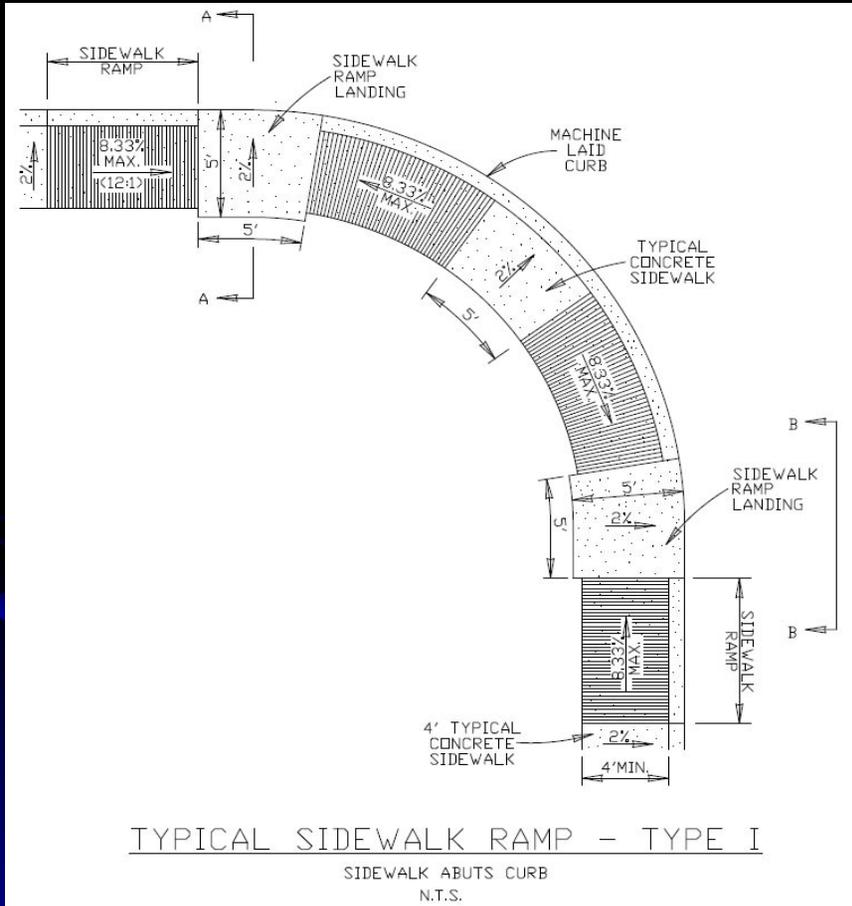


1999

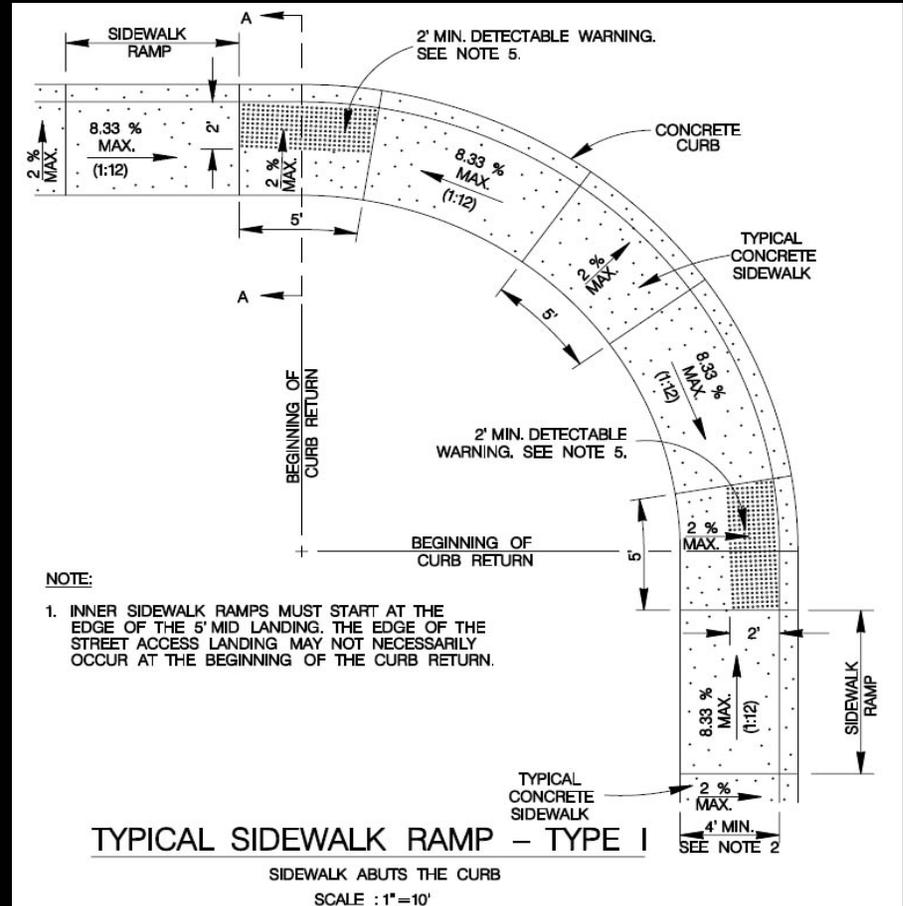


2001

Ramp Design History



2002



2006

Current Issues

- Standards
 - Ramp Design Considerations and Conflicts (COSA Standards)
 - Ramp Placement (Conflicts)
 - Pedestrian Access Routes in Public Right-of-Way
- 

Current Standards

MOST STRINGENT STANDARDS APPLY

- City of San Antonio
 - Sidewalk and Driveway Construction Guidelines
 - Standard Details (May 2009)
- Texas
 - Texas Accessibility Standards (TAS)
 - TXDOT Standard Details (Ped 05)
- Access Board
 - Public Right-of-way Guide (PROWAC)
- US DOJ
 - 2010 ADA Standards for Accessible Design

Ramp Design

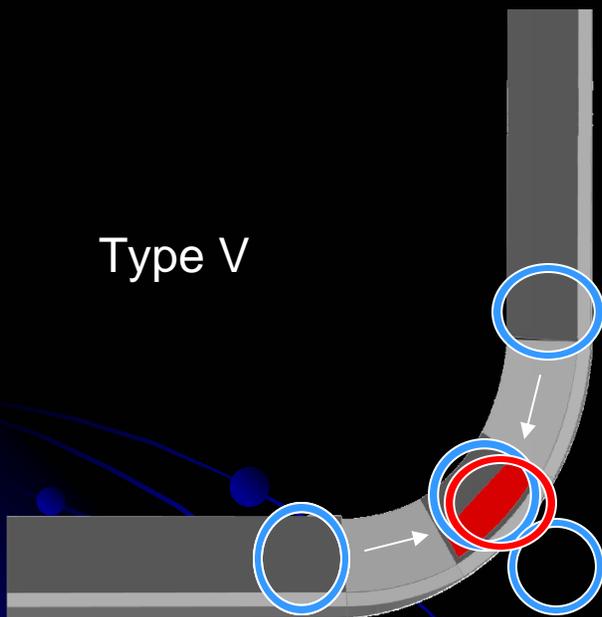
Typical Ramp Design Elements

- Ramps – Ramps have grades greater than 5% with a maximum grade of 8.33%
- Landings – Flat (2% max) areas that provide a relief and refuge for all users and allow for turning movements. Usually 5'x5' area (min 4'x4')
- Detectable Warnings – Provide a tactile warning for visually impaired users that they are about to enter a vehicular travel way

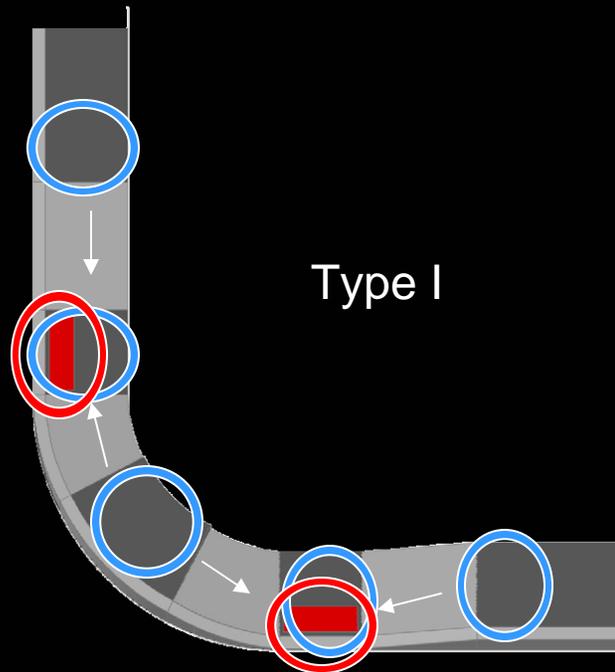
Ramp Design

Typical Ramp Design Elements

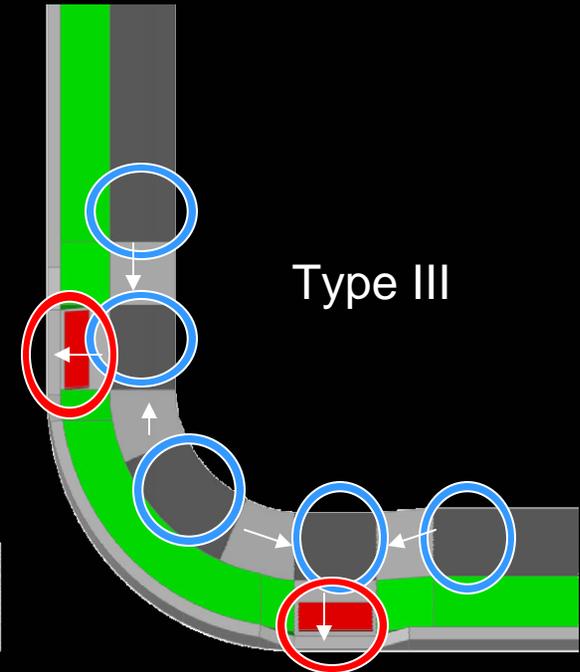
Type V



Type I



Type III



1. RAMPS

- 8.33% **MAX Grade**
- Length may not exceed 15 ft

2. LANDINGS

- 2% Max Slope
- Top/Bottom of ramp
- On pavement for Diagonal Ramps

3. Detectable Warnings

- Parallel to Street
- Min 2' depth
- Truncated Domes

Ramp Design

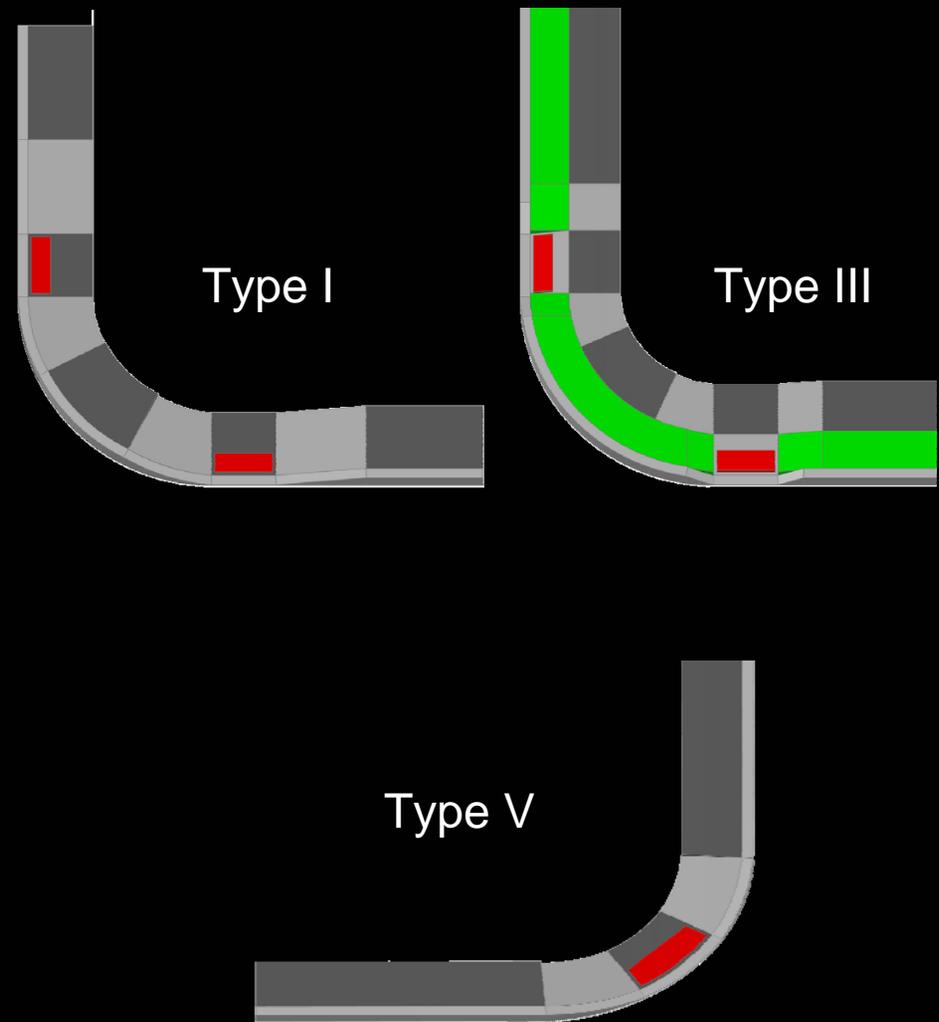
DESIGN CONSIDERATIONS:

Type I (Parallel) & III (Perpendicular) Ramps

- Ramps at PC/PT points
 - Directional
- Type I
 - Creates multiple ramps for through movement
 - Drainage
- Large curb radii set crossings away from intersections
- Traffic Signs placed before crossing

Type V (Diagonal) Ramps

- Use of this design requires a “Significant Restriction” from using other types of ramp per notes on standard details
- Not directional
- Drainage
- User Safety - Turning movement in roadway



Ramp Design

Blended Transitions

- When a pedestrian access route intersects a vehicular travel way at less than 5% it is called a blended transition.
- Detectable Warnings are placed at the curb line even if curved.
- Typically used where sidewalks are separated from curbs



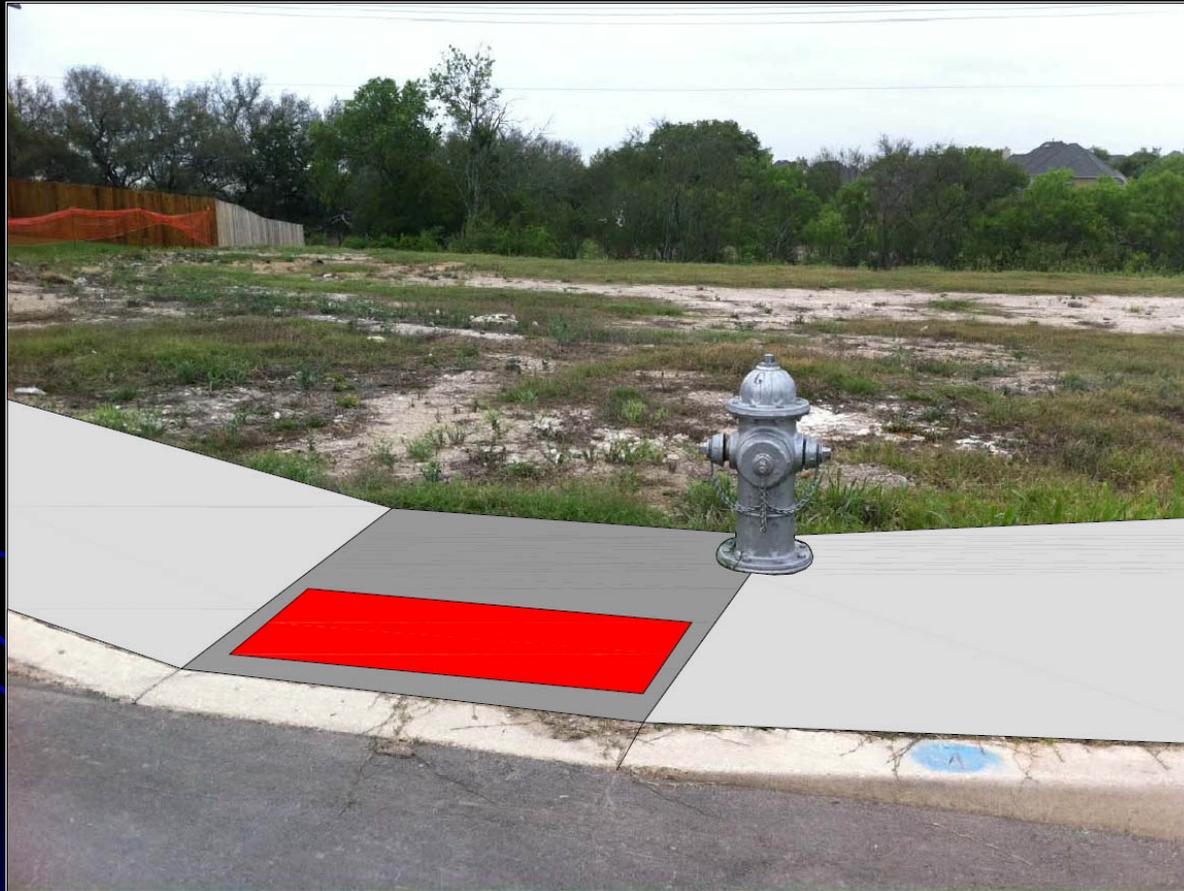
Ramp Design

Typical Ramp Design Elements



Ramp Placement

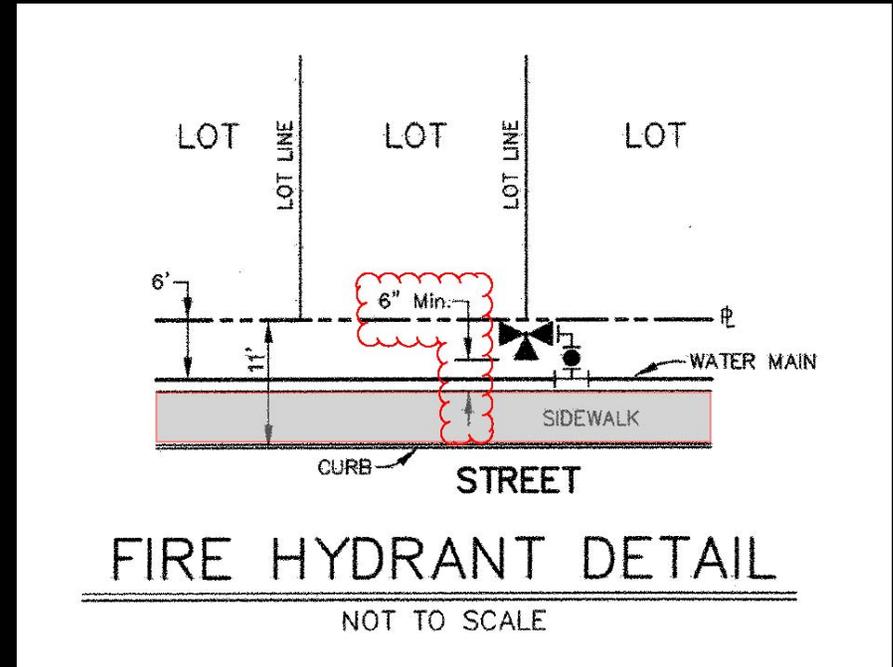
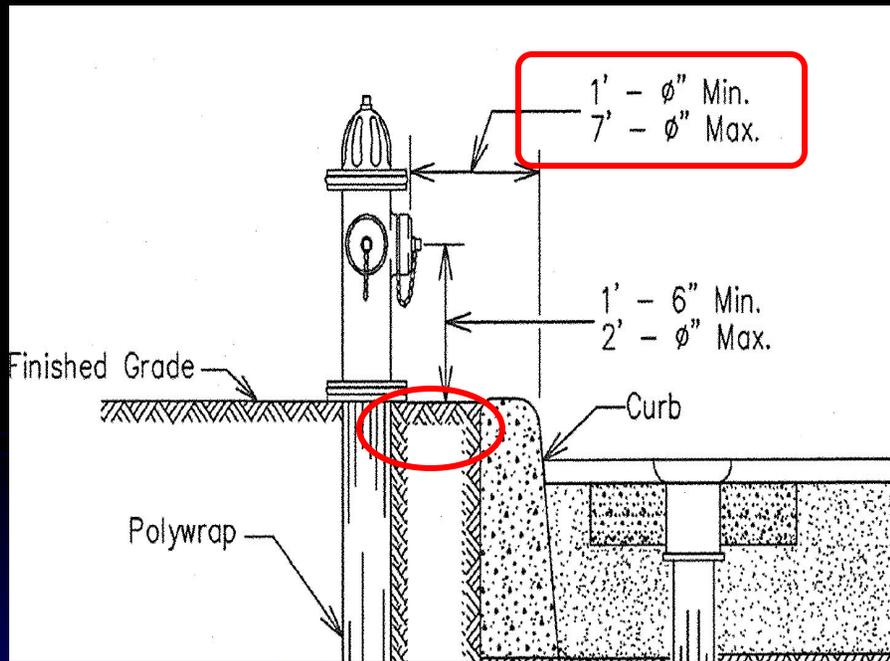
Conflicts



- Utilities

Ramp Placement

Conflicts: Utility Details



- Specify Distances
- Show Sidewalk

Ramp Placement Conflicts



- Driveways

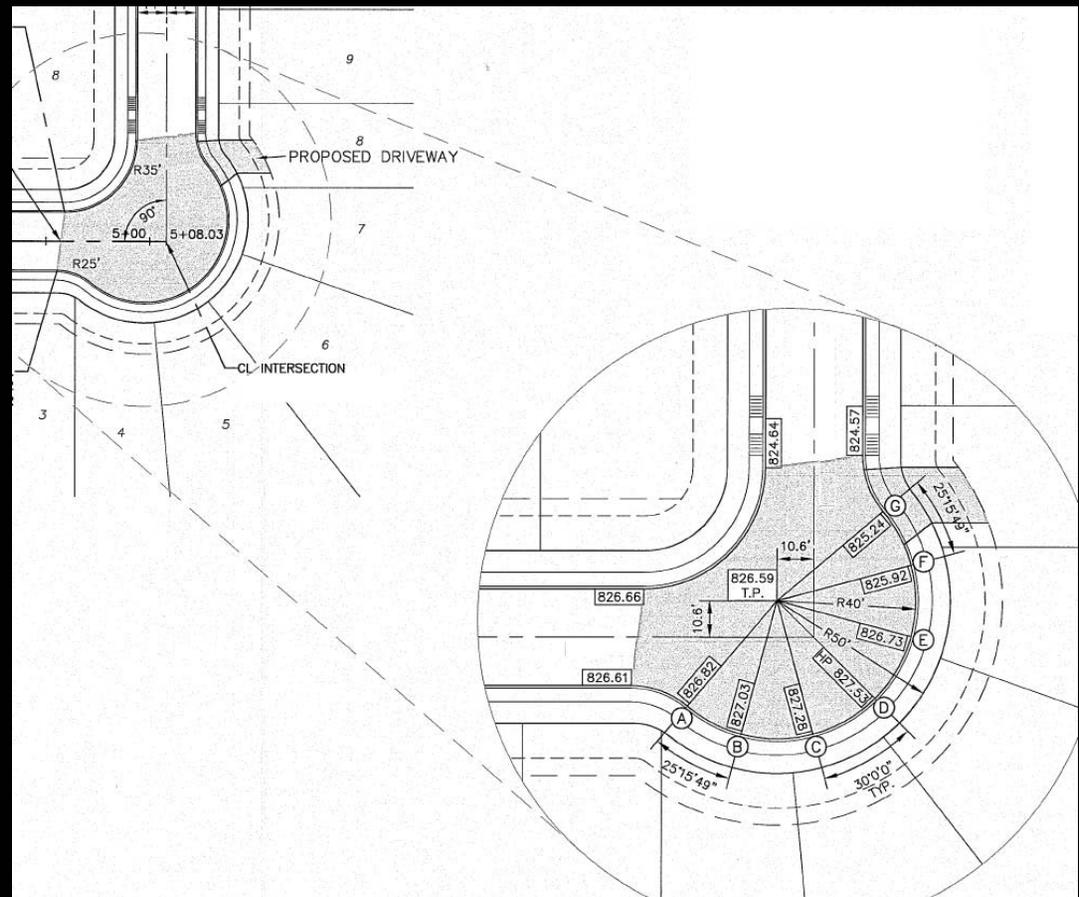
- T-Intersections and Knuckles (elbows)

Ramp Placement

Conflicts

Possible Design Solutions:

- Identify proposed driveway locations on plans
- Realign property lines



Ramp Placement

Conflicts

- Plan and design for ramps along pedestrian routes to amenities, schools, bus routes, mailboxes, ingress/egress the subdivision, and to homes as part of the public infrastructure
- Avoid drainage structures, driveways, etc.

Pedestrian Access Route in Right-of-Way

- Accessible Route - A continuous unobstructed path connecting all accessible elements and spaces of a building or facility. Interior accessible routes may include corridors, floors, ramps, elevators, lifts, and clear floor space at fixtures. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps, and lifts. Nowhere shall the cross-slope of an accessible route exceed 1:50 (2%).

-Texas Accessibility Standards 3.5.4 & 4.3

- Pedestrian Access Route--An accessible route for pedestrian use within the public right-of-way.

- Texas Administrative Code, Chapter 68

- Route (Path) includes: Ramps, Sidewalk, Crosswalks

Pedestrian Access Route in Right-of-Way Sidewalks

- Grade (Slope)
 - May not exceed the grade established for the adjacent roadway in Public Right-of-Way except where design meets TAS Standards (Rails, Landings, etc.) [Texas Administrative Code Ch 68]
 - Straight paths preferred over Meandering paths – Turning movements and length [Accessible Public Rights-of-Way Design Guide 3.2.2]
 - Change in grade should not exceed 13% along direction of travel (rare)
- Cross-Slope
 - Shall not Exceed 2% [TAS 4.3.7]
- Width
 - Minimum clear width of 4' [COSA UDC 35-506(q)]

Pedestrian Access Route in Right-of-Way

Crosswalks

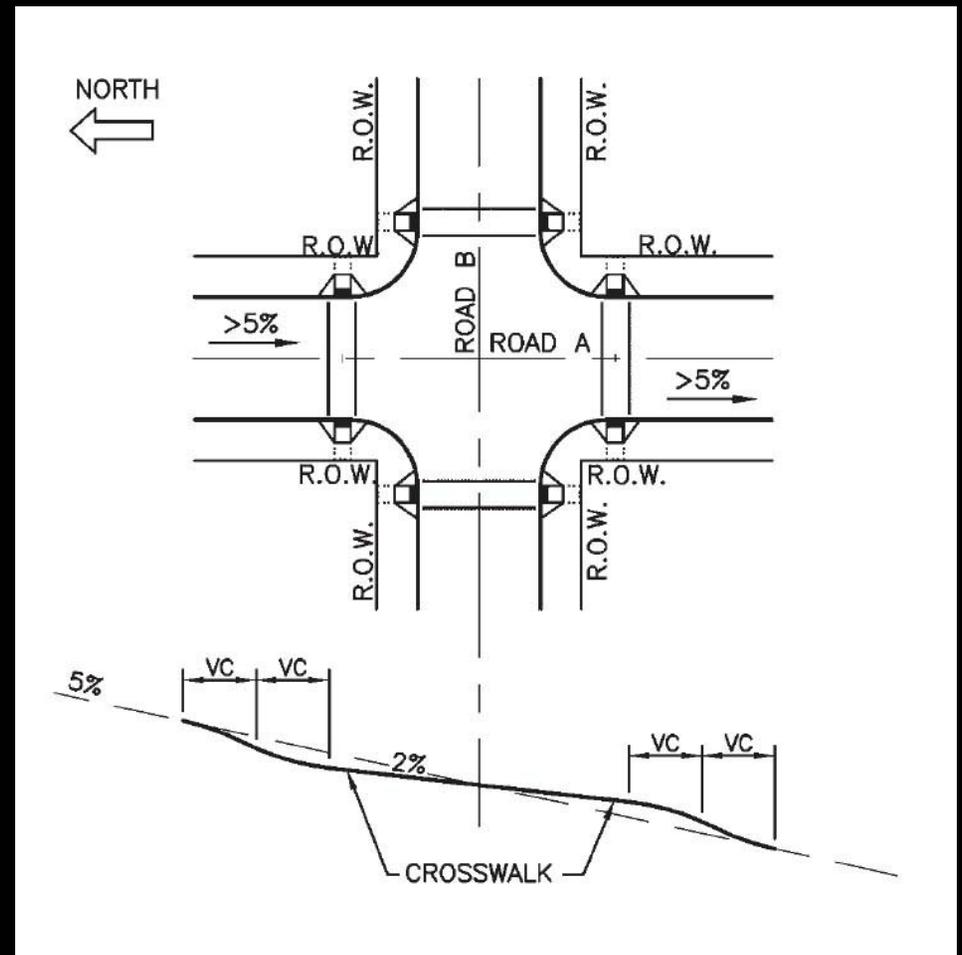
- Crosswalk--That part of a roadway where motorists are required to yield to pedestrians crossing, as defined by state and local regulations, whether marked or unmarked

-Texas Administrative Code, Chapter 68

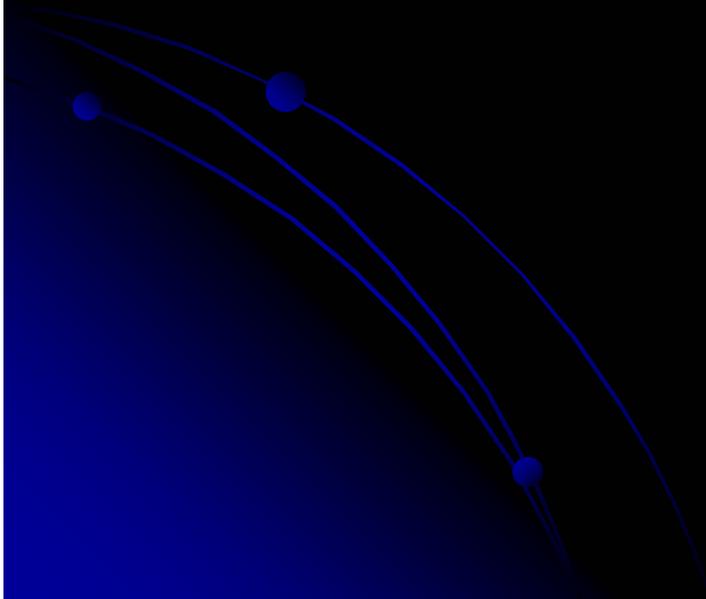
Pedestrian Access Route in Right-of-Way

Design at Intersections

- 2% Cross-slope to be maintained for each pedestrian crossing within the street (2% Intersection “Table”)
- Type of ramp used, curb radius will dictate limits of 2% area
- Consideration given to drainage, grading, and sight distance



QUESTIONS



Sources/Resources

- <http://www.access-board.gov/>
 - <http://www.fhwa.dot.gov/accessibility/>
 - <http://www.access-board.gov/prowac/index.htm>
 - <http://www.license.state.tx.us/ab/ab.htm>
 - <http://www.access-board.gov/prowac/alterations/guide.htm>
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